CLAIMS

1. A non-cyanogen type electrolytic solution for plating gold, containing gold salt as a supply source of gold and added with a non-cyanogen type compound, wherein the electrolytic plating solution is added with one selected from a group of thiouracil; 2-aminoethanethiol; N-methylthiourea, 3-amino-5-mercapto-1,2,4-triazole; 4,6-dihydroxy-2-mercaptopyrimidine; and mercapto-nicotinate; as a compound forming a complexing compound with gold.

2. A non-cyanogen type electrolytic gold plating solution as set for claim 1, wherein chloroaurate or gold sulfite is used as gold salt.

3. A non-cyanogen type electrolytic gold plating solution as set for claim 2, wherein non-cyanogen type compound has a deposition potential in a range from -0.4 Vvs.SCE to -0.8 Vvs.SCE.

4. A non-cyanogen type electrolytic gold plating solution as set for claim 3, wherein non-cyanogen type compound is thiouracil or 2-aminoethane thiol.

5. A non-cyanogen type electrolytic gold plating solution as set for claim 3, wherein a hydrogen ion concentration pH of the non-cyanogen type compound is 12 to 5, and more preferably is 8 to 5.

6. A gold plating method using a non-cyanogen type electrolytic solution, containing gold salt as a supply source of gold and added with a non-cyanogen type compound, wherein the electrolytic plating solution is added with one selected from a group of thiouracil; 2-aminoethanethiol; N-methylthiourea, 3-amino-5-mercapto-1,2,4-triazole; 4,6-dihydroxy-2-mercaptopyrimidine; and mercapto-nicotinate; as a compound forming a complexing compound with gold.

7. A gold plating method as set for claim 6, wherein the gold plating is carried out in a condition of a current density of 0.5 A/dm^2 or less.